

REMARKS

Claims 1-10 are pending.

By this Amendment, claim 1 is amended.

The Office Action rejects claims 1-3 under 35 U.S.C. § 102 over Tamura (JP 7-201720).

This rejection is respectfully traversed.

Claim 1 recites an electron beam lithography system that includes exposure map creating means and proximity effect correcting means wherein said exposure map creating means includes judging means for judging whether or not each shot straddles a plurality of meshes by using a plurality of memories and adding circuits. It is respectfully submitted that Tamura does not disclose or suggest the exposure map creating means including judging means for judging whether or not each shot straddles a plurality of meshes by using a plurality of memories and adding circuits. Accordingly, claims 1-3 are not anticipated by Tamura.

The Office Action rejects claims 4-10 under 35 U.S.C. § 103 over Tamura in view of Saitou (USP 4,692,579). This rejection is respectfully traversed.

Claims 4-9 are all dependent from claim 1, and as explained above, Tamura does not disclose the recited exposure map creating means including judging means for judging whether or not each shot straddles a plurality of meshes by using a plurality of memories and adding circuits. This deficiency is not remedied by Saitou and accordingly claims 4-9 are not obvious over the applied references.

Further, claims 4-7 and independent claim 10 recite $N \times M$ memories. The Office Action asserts that Saitou features a conventional exposure map having n parts in the direction of width and m in the direction of height. However, as can be seen with reference to column 4, lines 18-27, Figs. 5A-5C show an example of division of a pattern. The pattern is divided into N equal parts in the direction of width and into M equal parts in the direction of height. This has nothing to do with $N \times M$ memories as recited in the claims, but instead has to do with division of a pattern into parts. Accordingly, even if the teachings of Saitou were combined with Tamura as suggested, the resulting combination would not include $M \times M$ memories as recited in these claims.

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The Office Action also rejects claims 8-9 under 35 U.S.C. § 103 over Tamura and Saitou and further in view of Komaru (USP 3,921,135). This rejection is respectfully traversed.

Claims 8 and 9 are allowable at least for the reasons discussed above regarding claim 1, due to their dependence on claim 1 and the failure of Komaru to remedy these deficiencies. Further, Applicants note that in the present invention each partial memory 34 or 44 shown in Figs. 3 and 8 memorize data as shown in Table 1 at page 26 while in Komaru a dot memory memorizes an on or off signal only.

For at least these reasons, claims 8 and 9 are not obvious over the applied references. Withdrawal of the rejection is requested.

For at least the above reasons, it is submitted that the application is in condition for allowance. Prompt consideration and allowance are solicited.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **"Version With Markings To Show Changes Made."**

The Office is authorized to charge any fees required under 35 U.S.C. § 1.16 and 1.17, and fees for a petition for an extension of time under 37 C.F.R. §1.136, to Deposit Account 11-0600.

Should there be any questions concerning this matter, the Examiner is invited to contact Applicants' undersigned attorney.

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Respectfully submitted,



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VERSION OF AMENDED CLAIMS MARKED UP TO SHOW CHANGES

IN THE CLAIMS

Please amend claim 1 as follows:

1. (Amended) An electron beam lithography system comprising:
 exposure map creating means which, based on positional relations between meshes
dividing a region to be rendered by an electron beam on the one hand and shots to be rendered by
said electron beam on the other hand, creates an exposure map by calculating an area density
from a shot area included in each of said meshes; and
 proximity effect correcting means for correcting a level of exposure for each of said shots
by referencing said exposure map so that each shot is exposed at the corrected level;
 wherein said exposure map creating means includes judging means for judging whether
or not each shot straddles a plurality of meshes by using a plurality of memories and adding
circuits.